How Personality Traits Relate to the Self-esteem of Greek Children and Adolescents with Dyslexia

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Abstract
The main aim of the current study is to find out whether personality traits have any influence on self-esteem of dyslexic adolescents. Personality traits were first identified by the use of the ‘Personality Questionnaire for Children and adolescents’ (Besevegis & Paulopoulos, 1998) while self-esteem was measured by the ‘Culture-free Self-esteem Inventory’ (Battle, 1992). The participants consisted of 86 adolescents - boys and girls- aged 11 to 14 years old diagnosed with dyslexia. The results of the study indicated that two of the personality factors: conscientiousness (organization and achievement) and intelligence (receptivity to new experiences and self-confidence) play a significant role in their self-esteem. As far as the other factors were concerned the results of the study showed that they didn’t play a significant role in self-esteem. On a descriptive level it is clear that participants of high sociability and low withdrawal tend to have high self-esteem.

Keywords: dyslexic children and adolescents, personality traits, self-esteem.
1. Introduction
There is no universally accepted definition of dyslexia. Dyslexia has been associated with significantly impaired reading, spelling and writing problems during the last two decades (APA, 2000, Jordan, 1977; Wilson & Risucci, 1988; Pennington, 1991; British Dyslexia Association, 1994; Newton & Thomson, 1975). Reid & Kirk, (2001) and Reiter, Tucha & Lange, (2004) have associated dyslexia with problems in information processing and speed processing and organizational ability (Lemperou, Chostelidou & Griva, 2011). Elliot and Grigorenko (2014) support that dyslexia affects short-term memory, balance and visual ability.

All these constitute parts of one form of this specific learning difficulty. Carroll and Iles (2006), Diakakis et al, (2008), Halonen et al, (2006), also describe dyslexia as an important risk factor for current and future psychological dysfunction such as depression, anxiety and low self-esteem. Furthermore students with dyslexia are affected by stress and their everyday life might be very difficult (Meadan & Monda-Amaya, 2008).

These difficulties are associated with poor academic performance and children are considered to be lazy and easily giving up (Oga & Fatimah Haron, 2012).

Armstrong and Humphrey (2008) as well as Morris and Turnbull (2006) have described lack of self-esteem, need to feel accepted, emotional insecurity, and a sense of being different as common themes in adolescents with dyslexia.

**Dyslexia and specific personality type**
While the basis of personality is found in early childhood (3–7 years old) and more specific in the ways a child reacts and regulates him/herself, (Rothbart, 2011; Shiner & DeYoung, 2013), a great body of literature is also available on temperament and personality in middle childhood (7-12 years old) and adolescence (13–17 years old). However a specific personality type in dyslexic children and adolescents is still under consideration.

Hales, (1994) has failed to show a specific dyslexic personality but only some indications of how individuals with dyslexia develop. Girls in particular appeared to have had during the middle school years low confidence and optimism (Williams & Miles, 1985; Plaisant, 1989).

Most of the personality traits of the dyslexic children and adolescents rely on parents’ ratings and observations. Pihl & McLarnon (1984) and Riddick & al (1999) came to the conclusion that parents of children and adolescents with dyslexia had noticed problems in social skills and self-esteem

Parents’ reports showed that parents of children with dyslexia characterized their children more anxious and less happy than did parents of normally achieving children and described acting-out behaviour problem and their underlying feelings of sadness and self-doubt (Boetsch et al, 1996; Bender, 1987; Donawa, 1995). Additionally Van der Stoel (1990) found that children and adolescents recorded similar incidences of depression and distress while Osmond (1993) discovered furthermore themes of loss of confidence, self-doubt, and sensitivity to criticism. Furthermore, they report child’s inappropriate behaviour, problem in socialization with peers (Karande, et al., 2009) which may have impact on their self-esteem.

Kobi (cited in Critchley, 1970) describes an ‘infantile personality’ for dyslexic children and adolescents, that lacks maturity though both Halpem (1953, cited in Wright & Groner, 1993) and Francis-Williams (1968) agree that the number of responses increases for normal children and adolescents even during the earliest years at school.

The present study focused on examining personality traits of dyslexic children and adolescents, as these traits were reported by their parents and their relationship with self-esteem of the specific children. More specifically the aim was to see how personality traits of dyslexic children and adolescents influence their self-esteem.
Dyslexia and self-esteem

Self-esteem is considered to be as a general positive evaluation of oneself (Smith & MacKie, 2007), with two distinct dimensions: the personal ability and the personal value (Gecas 1982. Orth & Robbins, 2014).

The ICD-10 (World Health Organization, 1992) describes emotional problems, low self-esteem, and problems in peer relationships as common characteristics of dyslexia. Dyslexia has been associated with danger of self-worth and problems related to self-esteem especially when poor performance occurs (Thompson, 1997) and children and adolescents try to use-specific cognitive functions they are weak at (Cohen 1994). A vicious cycle of failure in school, leading to low self-esteem, frustration and continuous fear of rejection has been reported (Arnold et al., 2005; Carroll, Maughan, Goodman, & Meltzer, 2005; Covington & Omelich, 1985; Hinshaw, 1992; Maughan & Carroll, 2006; Ryan, 1992; Rourke & Fuerst, 1991; Selikowitz, 1993; Alexander-Passe, 2006; Carroll & Iles, 2006). Snowling et al (2007) found a lower level of academic self-esteem in 12-year old dyslexics and a lower level of global self-esteem as well as self esteem related to school performance in dyslexic females according to Alexander-Passe, (2006).

The National Institute of Mental Health (1997) categorizes children with dyslexia in children that experience tremendous anxiety that leads to low self-esteem and in those that have achievements in many aspects of their life, but cause problems, by using some sense of humour or bullying as a system of defending themselves. In some cases children with dyslexia become more active and misbehave so as to cover the frustration and anxiety responsible for low self-esteem and negative self-image.

Research suggests that self-esteem is often low in populations with dyslexia, as children and young people show lower global self worth, lower perceived competence in scholastic domains, poor self-concept and unconscious concerns about self and others (Cohen, 1994). Although a large body of research indicates that self-esteem is often low, that it is not always the case. There are researches indicating no differences in self-concept and self-esteem between adolescents with learning disability and normal adolescents (Boersma et al, 1979; Smith & al, 1977; Kistner et Osborne, 1987; Montgomery, 1994; Winne et al., 1982) and many children and adults also show successful psycho-social adjustment and sufficient self-esteem. (Boetsch, Green, & Pennington, 1996; Burden & Burdett, 2007; Miller, Hynd, & Miller, 2005).

The present study will investigate personality traits of dyslexic adolescents described by their parents and the influence of these traits on self-esteem. Considering the main subject of the paper and literature review, followings are the research hypothesis:

1. Dyslexic children and adolescents that have high conscientiousness, organization and achievement will have high self-esteem
2. Dyslexic children and adolescents with high intelligence and receptivity to new experiences will have high self-esteem.
3. Dyslexic children and adolescents with more sociability and less withdrawal will have high self-esteem.
4. Dyslexic children and adolescents with more emotional sensitivity, tendency to help and agreeableness will have high self-esteem.
5. Dyslexic children and adolescents with less atomism/egoism and emotional instability will have high self-esteem.

2. Method

2.1 Participants

The participants that contributed in the research were dyslexic adolescents with their parents. The adolescent participants attended the 6th grade of primary school (n=12) and the 1st, (n=28), 2nd (n=36) and 3rd (n=10) grade of secondary school. There were 52 males (60.46%) and 34 females (39.54%), with a mean age at the time of testing of 12.6 years (SD 2.14; range 11,7 - 13,6). Parents and/or teachers referred the children and adolescents because of learning problems and poor academic achievement. All children were assessed by an educational psychologist, and dyslexia was identified by the standard IQ-reading ability discrepancy criterion.
From the participants less than half were the first child in the family \( n=34, 42.8\% \), half were the second \( n=46, 52.3\% \) and the rest were the third \( n=6, 4.7\% \). The participants in the present study were also 86 \( n=63 \) parents of dyslexic adolescents. Parents’ reports of personality traits were obtained. One parent per child completed and returned questionnaires. The largest number of parents \( n=80, 95.2\% \) consisted of mothers (mean age=39) and the rest \( n=6, 8\% \) fathers (mean age=44). Responses on the highest level of education completed were bachelor’s degree \( n = 40, 47.6\% \), some college \( n = 8, 6.3\% \), high school diploma \( n = 35, 42.8\% \), and some high school \( n = 4, 4.7\% \). The analysis took account of the same living areas (all the participants were living in the in urban areas).

All the children and adolescents came from middle class families, so there were no significant differences as far as the socioeconomic status was concerned. Parental consent forms were taken since they participated in the research too. The entire set of instruments was completed anonymously. Standardised conditions and instructions were followed.

2.2. Measures

The two instrument used for the collection of the above information were: a) ‘Culture-free Self-esteem Inventory’ (Battle, 1992) completed by children and adolescents b) ‘Personality Questionnaire Scale for Children and Adolescents’ (Besevegis & Paulopoulos, 1998) that was completed by parents.

2.2.1 ‘Culture-Free Self-esteem Inventory’ (Battle, 1992) (CFSEI-2)

Children’s perception was assessed with the use of the Culture-Free Self-esteem Inventory for Children and adolescents, Form A. This measure of self-esteem contains 60 items and provides a global measure of self-worth as well as four more sub-scales that assess lie and defensiveness, peer-related self-esteem, parental self-esteem and academic/school self-esteem. Reliability was comparable to both samples, with sub-scale reliabilities as measured by Cronbach’s a ranging from 0.72 to 0.83 which compares favourably (.79-.92) to the reliability estimates reported in the test manual (Battle, 1992). Additional internal consistency estimates of the four subscales produced average alphas of .85 for the general subscale, .77 Peer-related subscale, .81 parental subscale, and .69 for the academic scale. CFSEI-2 is culture-free; hence the title of the questionnaire, which is very important as the research itself took place in Greece and this is the main reason used.

2.2.2 ‘Personality Questionnaire for Children and Adolescents’ (Besevegis, 1998)

The instrument is considered to be valid in childhood and adolescence (Besevegkis, 1998) and we used the specific one due to lack of such instruments validated in Greek language. It consists of 99 items, which describe specific personality traits of children and adolescents. The factor analysis of the instrument’s constructor revealed 5 factors that described the personality dimensions and individual differences in children and adolescents.

Egoism/emotional instability (first factor) reveals what we could name as a difficult boy (Bezvelegis & Paulopoulos, 1998), while conscientiousness (second factor) reveals characteristics associated with mature, responsible and hard working children and adolescents in school. intellect/culture (third factor) includes intelligence, receptivity to new experiences and self-confidence while agreeableness/interpersonal sensitivity (fourth factor) includes what could be described as a ‘good’ child, meaning a child that cares about the problems of others, respectful to older people, sensitive and helpful without any doubt. Finally it is extroversion/introversion that can be divided into: sociability, extraversion and introversion. Taking into consideration the personality theories found in literature, it is obvious that the questionnaire is based on the big five model of personality (Digman, 1990, Goldberg, 1990, McCrae & Costa, 1985).

3. Results

The study’s primary aim was to examine a possible relationship of self-esteem with personality and how personality traits of dyslexic children and adolescents affect self-esteem. Exploratory data analysis was conducted in order to determine the exact nature of data analysis to be carried out. The CFSEI showed a clear distinction between participants who scored high in self-esteem and those who scored low in self-esteem.
3.1 Scores on the Culture-free Self-esteem Inventory-2 (CFSEI-2).

On the lie scale of the Culture-Free Self-esteem Inventory for Children and adolescents designed to measure defensiveness the mean was 7,5122 (m=7,5122), which shows lack of defensiveness. The score in self-esteem ranged from 24 which is the lowest score to 50 which is the total possible score excluding the lie scale. There were 50 items excluding the lie scale with the aim of measuring an individual’s perception. The mean in our participants was 33,9 (m=33,9). Chi-square test was carried out. Since variables were ordinal, transformation of those data in nominal (categorical) was necessary (Table 1). N=21 adolescents had an intermediate self-esteem while 17 adolescents had low self-esteem and only two who high self-esteem. In a further classification of self-esteem there were 42,5 % of participants with low self-esteem and 57,5 % of participants with intermediate to high self-esteem, (Table 2).

Table 1 Means and Standard deviations in relation to self-esteem and lie scales

<table>
<thead>
<tr>
<th>SELF-ESTEEM</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIES</td>
<td>40</td>
<td>33,9000</td>
<td>7,4689</td>
</tr>
<tr>
<td>LIES</td>
<td>41</td>
<td>7,5122</td>
<td>1,8320</td>
</tr>
</tbody>
</table>

Table 2 Frequencies in relation to low and high self-esteem

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low self-esteem</td>
<td>17</td>
</tr>
<tr>
<td>Intermediate to</td>
<td>23</td>
</tr>
<tr>
<td>High self-esteem</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
</tr>
</tbody>
</table>

3.2 Scores on the Personality Questionnaire for Children and Adolescents’

The participants’ scores in each subscale were added and then divided into their total. Reversion took place where it was appropriate. After 5 factors had been found a Chi-square test was used meaning that transformation of the data in nominal (categorical) was necessary since our variables were ordinal. (1=low ranging to five representing the high) The mean of each of the factors (Table 3) was:

Table 3 Means and Standard deviations in relation to five factors

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eg</td>
<td>42</td>
<td>2,9803</td>
<td>.5673</td>
</tr>
<tr>
<td>Con</td>
<td>42</td>
<td>2,7206</td>
<td>.6419</td>
</tr>
<tr>
<td>Int</td>
<td>42</td>
<td>3,4550</td>
<td>.5682</td>
</tr>
<tr>
<td>Agr</td>
<td>42</td>
<td>3,7284</td>
<td>.5116</td>
</tr>
<tr>
<td>Ext</td>
<td>42</td>
<td>3,5392</td>
<td>.5791</td>
</tr>
</tbody>
</table>

Note: EG= Egoism/emotional instability, CON= Conscientiousness, INT= Intellect/culture, AG= Agreeableness/interpersonal sensitivity, EXT= Extroversion/introversion

The main hypothesis in this research was that dyslexic children and adolescents with high conscientiousness, organization and achievement (factor 2) will have high self-esteem. The chi-square χ² test was carried out in order to investigate this hypothesis. The analysis revealed differences on a statistical significant level (χ² (1, 38)= 6,985, p<.02). The analysis displayed a significant result. Table 4 depicts the results of the analysis of the five factors and self-esteem.
The second hypothesis was that children and adolescents with high intelligence and receptivity to new experiences will have high self-esteem. The chi-square analysis ($x^2$) analysis revealed differences on a statistical significant level ($x^2 (1, 38) = 3.399, p < .07$). The analysis displayed a significant result.

As far as the research question of the influence of sociability and withdrawal to self-esteem in dyslexic adolescents was concerned, the chi-square analysis ($x^2$) that was carried out in this case showed that the results were not significant ($x^2 (1, 38) = 0.147$, n.s). Since the analysis displayed a non-significant result, comments cannot be made on a deductive level, but rather on a descriptive one. One can see that the participants (N=9) who show less sociability and more withdrawal have high self-esteem while on the other hand the same number of participants (N=9) are more socialized but have low self-esteem.

Additionally the results of chi-square analysis ($x^2$) for the relationship between agreeableness, interpersonal sensitivity and self-esteem were not significant ($x^2 (1, 38) = 0.128$ n.s). Therefore comments can only be done on a descriptive level. It is obvious in Table 3.1 that participants (N=11) who show less emotional sensitivity, tendency to help as well as agreeableness have low self-esteem. On the other hand 9 participants (N=9) that show more emotional sensitivity, tendency to help and agreeableness have high self-esteem.

Apart from that the last research question tried to estimate the relationship between Egoism/emotional instability and self-esteem. The results were not significant with chi-square analysis ($x^2 (1, 38) = 0.453$ n.s) for the relationship between Egoism/emotional instability and self-esteem. On a descriptive level Table 4 shows that participants (N=8) who show less atomism/egoism and emotional instability have low self-esteem but also 8 participants that show more egoism and emotional instability have low self-esteem.

Table 4: Cross-tabulation of the variables of the five factors and self-esteem

<table>
<thead>
<tr>
<th>E</th>
<th>G</th>
<th>C</th>
<th>ON</th>
<th>I</th>
<th>NT</th>
<th>A</th>
<th>GR</th>
<th>E</th>
<th>XT</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>8</td>
<td>14</td>
<td>11</td>
<td>6</td>
<td>12</td>
<td>9</td>
<td>11</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>high</td>
<td>36.4%</td>
<td>63.6%</td>
<td>64.7%</td>
<td>35.3%</td>
<td>57.1%</td>
<td>42.9%</td>
<td>45.8%</td>
<td>54.2%</td>
<td>47.1%</td>
</tr>
<tr>
<td>S.E</td>
<td>8</td>
<td>9</td>
<td>5</td>
<td>17</td>
<td>5</td>
<td>13</td>
<td>6</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>high</td>
<td>47.1%</td>
<td>52.9%</td>
<td>22.7%</td>
<td>77.3%</td>
<td>27.8%</td>
<td>72.2%</td>
<td>40.0%</td>
<td>60.0%</td>
<td>40.9%</td>
</tr>
</tbody>
</table>

Note: S.E = Self-esteem, EG= Egoism/emotional instability, CON= Conscientiousness, INT= Intellect/culture, AGR= Agreeableness/interpersonal sensitivity, EXT= Extraversion/introversion

Finally the research tried to estimate the relationship between position in the family and self-esteem and the results were significant with chi-square analysis ($x^2 (1, 38) = 0.008$ n.s). On a descriptive level Table 5 shows that the first and third child has lower self-esteem than the second child in a family with dyslexic children.

Table 5: Cross-tabulation of the variables of the position in the family and self-esteem

<table>
<thead>
<tr>
<th>SELF-ESTEEM</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>1,00</td>
</tr>
<tr>
<td>HIGH</td>
<td>1</td>
</tr>
<tr>
<td>KIDS</td>
<td>2,00</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3,00</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
</tr>
</tbody>
</table>

Note: 1=first child, 2=second child, 3=third child
4. Discussion

The current study sought to investigate personality traits of dyslexic adolescents as they were described by their parents and the influence of these traits on self-esteem. The authors first tested the hypothesis that dyslexic children and adolescents of high conscientiousness, organization skills and motives for achievement will have high self-esteem. As a result, this study found that participants of the present study who were well organised and motivated for achievement had high self-esteem and the opposite. According to Baron (1986, cited in Fox, 1993) people will be motivated if they expect their efforts to be linked with success. A dyslexic person in all probability will have to work harder than his peers to achieve their potential. If a dyslexic adolescent is well organised he/she will feel the recognition otherwise loss of motivation will serve as a mechanism in order to protect his/her self-concept ending up in loss of self-esteem. The first step which is associated with the family, is the recognition of these problems in order to provide a better basis for counseling adolescents with dyslexia. Parents, act as the reflection of the way their children perceives themselves (Kloomok & Cosden, 1994).

Secondly, the hypothesis that dyslexic children and adolescents but of high intelligence and receptivity to new experiences will have high self-esteem and the opposite was confirmed. Intelligence and receptivity to new experiences play a significant role in self-esteem. The years of repeated failure and frustration make children and adolescents to avoid new experiences. This can lead to a repeated circle of self-doubt, low self-esteem and expectation. On the other hand no significant relationship between sociability, social withdrawal and self-esteem was found.

That means that according to this study the level of sociability and withdrawal is not associated with self-esteem. Poor self-image and less peer acceptance is derived from the fact that (Ryan, 1992) dyslexic children and adolescents experience difficulties with their peers and their overall low peer acceptance (Bursuck, 1983; La Greca & Stone, 1990). Gjessing and Karlsen, (1989) found that dyslexic adolescents had a poor self-concept which was associated with poor peer relationship. Quitting and withdrawal are considered to be ways of dealing with feelings every time a dyslexic experiences difficulties. This can be transformed in a refusal to socialise with people outside the family. (Selikowitz, 1993).

Furthermore no significant relationship between high emotional sensitivity, tendency to help, agreeableness on the one hand and high self-esteem on the other hand was found. However it was noted that most of the dyslexic children and adolescents that were sensitive and had the tendency to help had high self-esteem. The sensitivity looks contradictory to high self-esteem. One possible explanation on the above contradiction could be it’s association with tendency to care about the others.

The author has also failed to find support for the hypothesis that adolescents with dyslexia who experience high atomism and emotional instability will have low self-esteem. The emotional instability of dyslexic adolescents and its association with low self-esteem is something that could be found in literature. Emotional instability is considered to be as one of the basic impacts of dyslexia for many bright students who are never provided with the necessary help to understand the causes of their academic difficulties. As they do not learn the appropriate skills for dealing with academic failures and obstacles (Lundquist, 1988; Moss & Fox, 1980), the instability and immaturity derived lead to low self-esteem.

Finally the findings for the relationship between position in the family and self-esteem are of great interest. The first and third child in a family with dyslexic children has lower self-esteem than the second child. This is something unexpected as the first child usually has higher self-esteem (Riddick, 1996) than the others. One important limitation of these findings is that we have no knowledge in cases of the second child.

The generalisation of the findings in the current study for all dyslexic children and adolescents is considered to be something difficult as the number of participants was small so it can’t be considered representative of groups of people to whom results will be generalized or transferred. Furthermore, there was little prior research on personality and dyslexia that made difficult to find a foundation for understanding the research problem. Additionally all the participants were from Greece. Apart from that it would be better for future researchers to revise the method for gathering data in the area of personality.
4.1. Suggestions and further considerations

A further research could examine the same aspects of personality traits and self-esteem, as it was done in the present study, but it should include a larger number of participants (dyslexic adolescents). It could also include additional age groups such as younger children and adults to see if the same correlation between personality traits and self-esteem applies to different ages.

Dyslexics are considered to be different rather than disabled (Logan, 2009). Therefore counselling can help children and adolescents to improve their self-control and acquire a positive way of thinking towards their own abilities. An individual counselling approach focused on taught basic literacy skills and enhanced self-esteem (Riddick & al, 1999) would help the child and the adolescent to understand his/her strengths and weaknesses and to identify negative thoughts and dysfunctional ways of dealing with school.

5. References


